

COLLINSTOWN BIODIVERSITY ACTION PLAN 2023

FACILITATED BY Community Foundation Ireland

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2 A local Biodiversity Action plan

Biodiversity Action Plans looks at what species and habitats are in an area, why that is important for the area and threats to those habitats. To move forward, the plan must include what actions are needed. It is then worth attempting identify who is going to carry out the actions, in what timeframe, as well as what resources are needed to carry out the plan. It is also essential to note who cans advise.

A Local Biodiversity Action Plan means we learn more about nature in our area, value nature in our area more, and conserve and enhance nature in our area more. In some cases, it may mean that very little is to be actively changed in the environment. It is important not to harm biodiversity in a mistaken attempt to improve things.

3 Irish Habitats

"Habitats are the basic building blocks of the environment that are inhabited by animals and plants, and which are important as units for site description and conservation management. A habitat is described as the area in which an organism or group of organisms' lives, and is defined by the living (biotic) and non-living (abiotic) components of the environment. The latter includes physical, chemical and geographical factors, in addition to human impact or management. Habitats are recorded, described and mapped for a variety of different reasons. It is important, therefore, that a standard approach is used when recording habitat information. " (Fossitt, n.d.)

So that there is a common understanding of different habitat types to be found in Ireland a book called 'A Guide to Habitats in Ireland' was commissioned by the Heritage Council of Ireland and was released in 2000.

A number of experts from different fields contributed to the book, however the text was compiled by Julie A. Fossit. 'A Guide to Habitats in Ireland' is often referred to as 'The Fossit Guide' or simply 'Fossit'.

4 General principles

The following general principles should be followed in the implementation of any actions included in this biodiversity action plan:

Always preserve features of high conservation value.

Fully understand the habitats and species of flora and fauna already associated with the given location.

Consult with range of specialists in various areas as much as possible, rather than rushing into actions.

Try to understand the big picture and be aware that some actions considered to be beneficial may not always be of benefit to biodiversity and nature in every setting. For example, planting trees is usually a good idea, but not if we are trying to protect a rare grassland and its associated fauna. There are plenty of other examples...

Work with, rather than against nature to make biodiversity enhancement more efficient

Strive to use native species whenever planting/sowing

People can benefit from biodiversity, as much as biodiversity can benefit from people. The concept of ecosystem services help dispels the ideas of conflict between biodiversity and local development. Ecosystem Services can be organised into 4 broad categories.

Supporting Services	These are services, such as nutrient cycling and soil formation, which are needed for the production of all other services.
Provisioning Services	Products obtained from ecosystems, such as food or timber.
Regulating Services	The benefits obtained from the regulation of ecosystems, including services such as purification of water, flood control, regulation of the climate etc.
Cultural Services	The benefits people obtain from ecosystems through spiritual enrichment, reflection, recreation, and aesthetic experiences.

Source: (Science Communication Unit, University of the West of England, 2015)

Birdwatch Ireland has produced a list of 'Birds of Conservation Concern in Ireland 4: 2020–2026' (Gilbert, et al., 2021). This assessed the conservation status of 211 Irish bird species recorded in Ireland. Birds of Conservation Concern Ireland 4 (BOCCI 4) ranks bird species as Red, Amber, or Green.

Red listed species are those of highest conservation priority, being globally threatened, declining rapidly in abundance or range, or having undergone historic declines from which they have not recently recovered.

Amber listed species have an unfavourable status in Europe, have moderately declined in abundance or range, a very small population size, a localised distribution, or occur in internationally important numbers.

Green listed species do not meet any of these criteria and therefore require little direct conservation action.

Cease using herbicides, insecticides, fungicides and any other pesticides or chemicals where possible. For example, it is possible to maintain border edges of green areas without using herbicides. This task can be carried out quite easily either with a manual hoe, shovel, or use of strimming equipment.

Follow Sustainable Use Directive guidelines if applying any pesticides.

Wild can be beautiful. Always strive to make places aesthetically pleasing, so that others will be inspired to copy your good example.

The following pages go through several locations in Collinstown , discuss the site and make suggestions for the future

5 Market square.

In the centre of the village is a green space with an old ash tree, three ornamental cherry and a small horticultural bed. The grass contains a good variety of wild flowers, including mayweed, yarrow, and red clover.

5.1 Proposed actions

- Unfortunately, the old ash tree may have to be looked at by arboriculturist, as Ash Dieback may be a problem.
- Planning for the future of the green space, there are three trees planted at one end of this green already, so a replacement tree may not be needed.



Figure 1 Ash tree showing signs of die back

- Reduce slightly, the mowing in some small areas, with the objective to allow more flowering.
- Clover can flower on a short mowing rotation.

This is a very small area, probably with a lot of pedestrian foot-fall. Reduced mowing would be in line with actions for All-Ireland pollinator Plan. The pictures below are plants at edges that managed to evade the mower on the green.



Figure 2 Mayweed



Figure 3 Yarrow and buttercup

6 Community hall

Behind the hall is an area of "waste ground", between the hall and the hedge of the agricultural field.

The hedge has beech, hawthorn, holly, hawthorn, sycamore and willow.

This area is providing a little space for nature with numerous wild flowers, such as, vetches, lesser celandine, thistle, red dead-nettles.



Figure 4 Biodiversity area at the back of hall

6.1 Proposed actions

- Give this area biodiversity status
- Keep litter and dumping free
- Avoid use of sprays

7 National school

The school has an area of grassland and hedges and tree planting round the school.

7.1 Assessment

The newer planting at the back of the school is varied with native bird cherry, oak, sorbus. The edges in many places are allowed to grow wild, and are good for biodiversity with plants such Red Bartsia, Yarrow, Thistle, Nipplewort and Hogweed. In some places there seems to be use of herbicide spray.



Figure 5 wall with harts tongue fern, black spleenwort , also brambles



Figure 6 Appears to be sprayed



Figure 7 wildflowers , great willowherb at back of school



Figure 8 Yarrow , thistle , nettle bramble , back of school

The grass outside the gates at the carpark has cat's-ear, knapweed, speedwell, dandelion, autumn hawkbit, red clover, white clover, selfheal.

In addition this area is part of the flowering fruit trees project .



Figure 9 Cat's-ear carpark grass



Figure 10 foraging bee on white clover at carpark grass

8 Church grounds

The church is likely to be an old site with a medieval history of it being a rath before a church.

The church has mature trees, beech, lime, horse chestnut and ash. There is also modern landscaping at the front of the church. There is a grass area at the back and more grass associated with the Parochial House. There is some scrub with brambles at the border with the farmland that runs down to the lake. The church has built habitat including stone walls bordering the school and out buildings.



Figure 11.Grassland and mature trees behind church

8.1 Assessment

The mature trees are large three-dimensional habitat in themselves, and valuable for fungi, invertebrates and birds. The *Skimmia* in the landscaping was feeding bumble bees at the time of early spring visit, *Bombus lucorum*. It was noticed that bees were also feeding on the weeds, red dead nettle and fumitory. The stone walls bordering the school have Harts tongue fern and black spleenwort. There is also ivy which is good for wildlife in many ways, but not good for maintenance of stone walls. The walls have numerous crevices which are ideal for invertebrates. The large stump at the front of the church has a patch of native grassland with, many species including orchids, yarrow, ribwort plantain , stitchwort and clover.



Figure 12 Bumblebee on red dead nettle flowe



Figure 13 Orchid in church grounds at old stump

8.2 Proposed actions for church and school

- Liaise with parish groups to support biodiversity actions
- Instigate some of the All-Ireland Pollinator Plan actions. The easiest of these is reduce mowing frequency. This could be difficult within school play areas, but very possible at the back of church and also possible in carpark grass. It is not suggested that the entire area is left unmown or that grass is left for the entire summer.
- Mow the edges regularly, to maintain an ordered look, and decide which areas can be left for a period to increase the range and density of flowering of native plants already present in the grass.
- Remove all grass cuttings, don't leave these to rot in.
- A plan for the disposal of grass waste needs to be developed
- Monitor what wild flowers appear.
- Monitor what insects visit the flowers, Use FIT count method, details supplied
- Reduce use of herbicides as possible
- Allow some ferns to grow in wall as these are not damaging to structure
- Maintain crevices in stone wall, if possible, for invertebrates.
- Value the wild plants in school hedgerow.
- The mature trees may possibly have to be removed in the future. This maybe because of safety concerns, Ash dieback and the natural aging of beech. When trees are not in a public place with safety concern it is important to remember that old trees are vital biodiversity habitats, for birds, bats and invertebrates. In the planning it is important to consider replacement with native trees such as oak. Also, large sections of dead wood

trunk left , safely, are invaluable as habitats for invertebrates and fungi and associated birds and small mammals. This should be included in any biodiversity plan. All dead wood habitat is often simply removed, or chipped, by contractors.

Statement of the Spring 2023 General Meeting of the Irish Catholic Bishops' Conference

Recommending 30% of parish grounds to be returned to nature by 2030

Bishops received a report on the wide range of work being undertaken by its Laudato Si' Working Group, together with various related initiatives being undertaken at parish level across the country.

In response to the impending loss of nature to our world, the call of Pope Francis' 2015 encyclical letter, Laudato Si', and the agreements made at the recent UN Conference on Biodiversity (COP15), bishops ask parishes, through their parish pastoral councils and diocesan trusts, as a first step, to identify and care for 30% of parish grounds as a haven for pollinators and biodiversity, in order that it can be enjoyed in perpetuity by the whole community.

Bishops said, "In embracing this initiative we encourage parishes to expand their circles of solidarity, to protect and care for biodiversity and recommend that, by 2030, 30% of church grounds be returned to nature. The first goal of Laudato Si' asks us to respond to the 'Cry of the Earth'. In Laudato Si' we read that this diversity of species has an 'intrinsic value independent of their usefulness. Each organism, as a creature of God, is good and admirable in itself' (LS 140). Humanity is called to care for the earth and all of its creatures, in other words to 'live out our vocation to be protectors of God's handiwork' (LS, 217)."

9 Graveyard

The graveyard has a boundary to the east of large mature oaks. The understory is cherry laurel.



Figure 14 mature oak in spring



Figure 15 Continuation of mature oak north of graveyard



Figure 16 Brambles in the foreground, cherry laurel behind

The boundary of the graveyard had in the past, large conifers. These were recently removed and the hawthorn hedge cut back. This allowed a germination of a number of native plants in the soil.



Figure 17 hawthorn hedge cut back

There is an area not used for burials yet in grass.



Figure 18. Opened up ground foreground, area of grass background

9.1 Suggested actions

- The boundary hedge of whitethorn, if managed correctly can be very valuable for biodiversity. Seek information from Hedge-laying Association of Ireland and plan to have two-year-old growth allowing the hedge to flower profusely and set berries.
- The large mature oak to the east, are a great biodiversity asset and should be recognised as such.
- Mature trees are an important aspect of the Collinstown Area landscape. Interestingly this can also be seen on the first edition maps dating from the 1840s, and is a topic for a further tree mapping, project.



Figure 19 First edition map 1840, trees are marked along hedgerows

- The cherry Laurel is not good for biodiversity, especially under the oak, and should be cut to the stump and treated with herbicide such as glyphosate plugs.
- A natural ground flora should be allowed to develop along the boundary without resort to herbicide.
- It may be possible to reduce mowing frequency slightly to allow brief flowering in unused grass areas. This "meanwhile use", within the graveyard, as a biodiversity action, adds to pollinator food availability.

10 The GAA pitch and Pitch and Put

This is a community area of amenity grassland. There are boundary hawthorn hedges with violets, bluebells, primroses, stitchwort, ferns, cleavers, nettles.



Figure 20 Older hedge, with bluebells

There is also a more recent hedge between sports pitch and the golf area.



Figure 21 Modern hawthorn hedge to the north

From looking at the old maps the oldest hedge is the back hedge (to the east) of the both areas as it is marked on the 1840s maps, and is currently the most biodiverse.

There is also young fruit trees at this site and lovely public signs

Recently large conifers have been felled. At time of visit the next step had been to spray off any native plants that had appeared.

10.1 Proposed actions

- Adopt some actions from All- Ireland Pollinator Plan.
- Utilise the advice given in the guide available online, see information sheet.



Figure 22 A lot of mowing on site

- Reduce herbicide usage, as much as possible, especially avoid use around hedges
- Take part in simple pollinator monitoring

11 The Pound and Beechpark

The area at the junction of the Mullingar Road and the local road heading round by Robinstown and Clondavreen is known locally as The Pound.

There is a small area of woodland south of the cross, which is on old maps. The trees appeared to have been cut recently and replanted. The other areas of woodland in the field

behind have gone. As this is a Long- Established area of woodland it is more likely to have associated fungi and invertebrates.



Figure 23 1840 map showing existing woodland at crossroads



Figure 24 Recent image, same site

There is a very attractive stone wall gate posts and gates.



Figure 25 Cross roads at the Pound



Figure 26 Cut stone gate post



Figure 27 Stone wall

On the west side of the cross roads is a small amenity area with cut grass and a more recent stone seating structure. There is a large poplar tree and some other ornamental trees planted. The hedgerow in the back has numerous elms, holly and beech. There is herbaceous planting which has become invaded by winter heliotrope.



Figure 28 Large poplar tree and stone herbaceous beds



Figure 29 Winter heliotrope in foreground



Figure 30 Great recognition of dead wood habitat

The entrance section at Beechpark was very striking with the wildflowers present, including Fox-and-cubs, Selfheal, Orchids, red and white clovers and Daisies. There were bumble bees feeding on flowers, *Bombus pascorum* and *Bombus lucorum*. watch this area for possible waxcap fungi in the autumn. Do not attempt to kill moss, with poison, it is part of ground/ soil ecology



Figure 31 Grass entrance Beechpark, Fox and cubs flowers

11.1 Proposed actions

- Engage with residents of Beechpark on actions for pollinator plan. Especially reduced mowing pattern.
- Engage with owners of the corner wood, to establish high heritage value of stone wall and biodiversity value of woodland behind.
- Develop a plan for wall with Heritage Office, Westmeath Co. Council. Ensure survival of crevices and population of ferns
- Develop a plan for grass verge along wall considering pollinator pan actions.
- Develop awareness by all maintenance teams of why winter heliotrope is an unwanted species. Develop a long-term action plan for winter heliotrope, control. This is not easy to control and will take time. It spreads by root fragments. The method chosen will depend on labour available and skill level. Use of herbicides is also is dependent on skill levels available, and decisions by community.

12 Clog na Leinn

This is a new estate. At the time of visit the eastern section was a building site, so was not surveyed. Planning documents indicate than some of stream was to be culverted and some left open.

The open area at the entrance has new sown grass and two cherry trees



Figure 32 Planning diagram indicating culvert (dotted) and open stream

12.1 Proposed action

- Encourage residents to garden in biodiversity friendly manner
- Develop plan for disposal of cut grass
- Develop awareness biodiversity of stream among community

13 The Hill

This area has amenity grass to the front and a scrub area to the back.



Figure 33 Scrub at back of Hill housing

13.1 Proposed actions

- Awareness of the value of providing nest sites for House Martins. These birds of conservation concern nest under eaves of houses
- The scrub area at the back is currently providing at lot of habitats for invertebrates and song birds.
- Engage with residents and council to produce a biodiversity plan for maintenance



Figure 34 Houses with house martin nests

14 The Cut

Lough Lene is classified by EPA as of moderate water quality and the stream at the town as good water quality. However, the town stream and the River Deel are deemed to be of high risk of not reaching the required water quality standards required by the water framework directive. The area at The Cut is small and very well used, by the public. The Community of Collinstown, should support and encourage all efforts by the Co. Council including Biodiversity Officer to engage with biodiversity actions at this site including Actions for Pollinators. Cowslip was noted in the grassland, and nowhere else on visits.



Figure 35 Water quality map EPA

15 Field opposite church, belonging to Fergus and Grainne

The structure of the field has been altered recently due to a new footpath creation by the Council along the road. In the process a stone wall was removed, trees removed and the stream altered. There has been new tree and shrub planting along the stream The ditch between the field and Clog na Leinn estate was also mechanically cleaned. This field still contains open stream whereas much of the stream has been culverted elsewhere.



Figure 36 Google Street view from 2019



Figure 37 Google Street view 2009

The field is grazed by sheep, most months of the year.



Figure 38 Pool spring 2022



Figure 39 Algae growth spring 2022



Figure 40 Area dominated by creeping thistle

Overall, the soils are a limestone till, on a limestone bedrock. The soil type changes; near the stream it is has been poorly drained and has a peaty layer. Further up it is well drained. There appears to be few springs welling up in this area.



Figure 41 Soil map Collinstown

There is now an area of bramble scrub ending with a willow tree, to the west, and an area of dead wood and regrowing willow left after the digger work on hedge and stream. There is also two fenced off areas planted with trees.

The dry grassland is tightly grazed reducing survival of flowers. Recorded were dock, daisy, red-clover, bush vetch, lesser stitchwort, field woodrush, dandelion, ribwort plantain, silver weed, creeping thistle, eyebright, creeping buttercup, nettle, forget-me-not, mouse ear, sorrel, germander speedwell, sweet vernal grass, timothy, meadow foxtail, creeping cinquefoil. The hedges have violet, primrose, harts tongue fern, herb Robert, hedge woundwort.



Figure 42 Bombus lapidarius



Figure 43 Drier grassland

In the wet areas hard rush is dominant, but also meadow sweet, water mint, Square-stalked St. John's wort, Marsh Thistle, Marsh Bedstraw, Carnation sedge, Glaucous sedge, Cuckoo flower, Spotted orchid, Tufted For-get-me-not, Bottle sedge, Brown sedge, Field horsetail.



Figure 44 Orchid

The pools have Water cress and Gylceria grass.



Figure 45 Watercress in pool

The insects visiting the field include, orchid beetle, blue-tailed damselfly, common blue damselfly, Keeled skimmer dragonfly, green-veined white butterfly, ringlet, meadow brown,

small tortoishell, Bombus *lapidarius* (red tailed bumble bee) *Bombus lucorum*, *Bombus pratorum*, green grasshopper, rhagionid fly (snipe fly)

A trail camera was left at the spring and showed how important the open stream was for birdlife.



Figure 46 Snipe on stream

Snipe and grey wagtail, were recorded on stream in June 2022, both are birds of conservation concern in Ireland



Figure 47 Common blue damselfly



Figure 48 Green grasshopper



Figure 49 Female keeled skimmer dragonfly, not previously recorded this end of Co. Westmeath

15.1 Proposed Actions for Biodiversity

- Reduce the grazing pressures by using other grazers rather than sheep, such as a few cattle in autumn winter.
- Develop a rotation of grazing, and rest time, so flowers given opportunity to grow in summer.
- Monitor and identify plants, to see what appears.
- Manage spread of brambles, and willow.
- Manage pond nutrients by keeping livestock well away from pool areas. Install drinkers.
- Monitor the pond water levels, the algae growth, by regular photographs. This is to help develop a plan for the future. Note any invertebrates present, such as dragonflies, water creatures.
- Purchase National Biodiversity Data Centre, set of guides to butterflies, dragonflies, and shield bugs
- Control thistles and other plants by autumn/ early spring topping rather than high summer
- Engage with Lawpro and Co. Westmeath Biodiversity Officer (when appointed) to further develop understanding of the stream, pool, and small wetland hydrology and biodiversity. With further help, develop a plan to gradually habitats restoration.
- Recognition of site as a valuable habitat site in the village with wetland, open stream and grassland.
- Weed the new hedge at roadside, plan for hedge-laying in the future . Introduce hedge-laying in the community where possible.